

REMARKS

Applicants appreciate the indication of allowable subject matter in claim 3. The remaining remarks relate to pending claim 1.

Claim 1 is now rejected under 35 U.S.C. §103(a) for obviousness over U.S. Patent No. 3,490,956 to Wilton. The steel disclosed in the Wilton Patent contains only up to 0.12 wt. % carbon. In contrast, the steel of the present invention as exemplified in the example set forth in Table 1 contains preferably at least about 0.2 wt. % carbon. The steel of the present invention has improved abrasion resistance by the distribution of hard carbides in a steel matrix. Precipitation of the hard carbide particles is performed by heat treatment at 1100°C as detailed in paragraph [0027]. One skilled in the art would understand that heat treated steel has a martensite structure when the steel is heated at 1100°C in an austenite zone. Due to the distribution of the hard carbides in a martensitic matrix, the steel of the present invention has high hardness of 40 to 60 HRC as shown in Fig. 1. This high hardness is not obtainable in a ferritic stainless steel.

The Wilton patent is directed to a ferritic stainless steel that is resistant to ribbing or roping during deep drawing. The steel is relatively soft for facilitation of such operations. The addition of vanadium, zirconium and/or titanium are made to fix the free carbon and form a ferritic structure without the formation of chromium carbide unlike the hard carbides that are formed in the steel of the present invention. Claim 1 has been amended to require at least about 0.2 wt. % carbon. Nothing in the Wilton patent teaches or suggests a higher carbon content over 0.12 wt. %. Accordingly, claim 1 is believed to define over the Wilton patent.

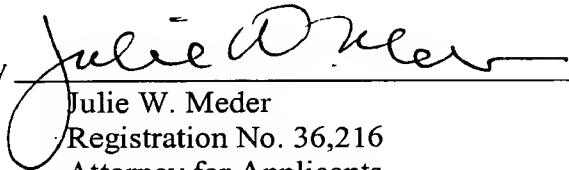
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Reconsideration of the rejection and allowance of claim 1 in addition to previously allowed claim 3 is respectfully requested.

Respectfully submitted,

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By

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